

071496

30 January 2009

**Architectus** Level 3, 341 George Street SYDNEY NSW 2000

Attention: Colin Odbert

### 33 CROSS STREET DOUBLE BAY

**Construction Methodology** 

The project involves demolition of the existing building including the ground The site is surrounded by three adjoining properties and Cross Street. It does not involve any additional excavation. There are a small number of piles that will need to be drilled and the material removed from the site. This will be done by placing a drilling rig on the upper basement slab and drilling through the basement slabs. Although there is a cut off wall, over the years the water inside the site has risen just below the existing lowest basement slab. Thus, the water table outside the wall is that of the area that is 2 metres below Crosst Street and inside the site is below the lowest basement. In the short term, the boundary wall is acting as an effective cut off wall; the building will be built using a construction zone in Cross Street and using a crane on the site. Initially, the site sheds and shades will be a hoarding on Cross Street but later some of them will The ground floor slab will also act as a be moved to the basement. construction platform in the future civic area, it is anticipated that the building will be a conventional prestressing/reinforcement structure. The construction will be carried out within the normal stationary

**Stormwater Methodology** 

requirements.

Since the building partially replaces an existing building, the stormwater methodology will be same as the existing. The existing connection to the grounds stormwater will be used.

## **Effects of Climate Change**

Since the building is away from the harbour foreshore and is approximately about 3 metres above sea level, it is not anticipated the building will be affected by an increase in the sea level. The existing retaining wall can take the increased water pressure. With respect to the rainfall, it is understood that at most, the rainfall for 1 day will increase by 10 percent as results show. To date, the study on shorter time frames is not completed. We will design the stormwater system for the increased rainfall.



Structural

Civil

Traffic

Facade

Engineers

TTW Group

### Directors

RT Green BE(Hons) MEng Sc FIE Aust D Carolan BE(Hons) MEng Sc MIE Aust R Van Katwyk BE(Hons) DipEng MIE Aust R Mackellar BE(Hons) MIE Aust B Young BE(Hons) MIE Aust M Eddy BE(Hons) MIE Aust

P Yannoulatos BE(Hons) Dip LGE MIE Aust D Genner BE(Hons) MIE Aust S Brain BE(Hons) MIE Aust

D Jeffree BE MIE Aust R McDougall BE MIE Aust

G Hetherington BE(Hons) MIE Aust S Schuetze BE(Hons) MIE Aust M Rogers BSc(Hons) MIE Aust

A Scroggie BE(Hons) LLB MIE Aust

J Tropiano BE MIE Aust

N Foye BE(Hons) MIE Aust G Freeman BE(Hons) Grad Dip IT MIE Aust

G Janes BE(Hons) MIE Aust

H Nguyen BSc(Eng) MIE Aust D Taylor BE(Hons) MIE Aust

Associates

(Copyright 2009)

M Raddatz

# Effect on adjoining overall water table

Since the basement is not changing, the development will have no effect on water flows or the water table in the vicinity of the development. The existing perimeter wall acts as a cut off wall, isolating the site from the surrounding areas. Drilling the piers will not change the water table within the site as the water table is below the existing basement slab.

# **Acid Sulphate Soils**

There is no excavation other than some material from the drilled piers. The effect of any acid sulphate soil is not anticipated to be great. Any spoil from the piers as required by authorities will be tested and will be treated appropriately.

Yours faithfully,

TAYLOR THOMSON WHITTING (NSW) PTY LTD

RICHARD GREEN

Director

P:\2007\0714\071496\Letters\090130 33 Cross Street Double Bay.bm.doc